

IN THE CLAIMS

1. (Currently Amended) A leaky-wave dual polarized slot type antenna, comprising:

a first shielding layer lying in an XY plane;

a first dielectric layer having a XY plane on top of the first shielding layer;

~~first and second feeding circuit sections formed on the top or lower portion of the first dielectric layer, comprising a plurality of first strip lines formed of a first loop with a designated shape from one side of the dielectric layer along the direction of the X-axis at a predetermined first period, and a plurality of second strip lines formed of a second loop with a designated shape from the other side of the dielectric layer along the direction of the X-axis at the predetermined first period, in order to propagate electromagnetic waves;~~

a first feeding circuit section formed on the top of the first dielectric layer, comprising a plurality of first strip lines formed of first loops with a first designated shape from one side of the dielectric layer in the direction of the X-axis at a predetermined first period, in order to feed electromagnetic waves;

a second feeding circuit section formed on the top of the first dielectric layer, comprising a plurality of second strip lines formed of second loops with a second designated shape from the other side of the dielectric layer in the direction of the X-axis at the predetermined first period, in order to feed the electromagnetic waves;

a second dielectric layer formed on the top portion ~~part~~ of the first and second feeding circuit sections ~~or the top portion of the first dielectric layer~~; and

a second shielding layer with a first slot section and a second slot section, formed on the top or lower portion of the second dielectric layer, transmitting the electromagnetic waves input to fed to the first and/or and second feeding circuit sections as vertically polarized waves vertical polarization and/or and horizontally polarized waves horizontal polarization.

2. Canceled.

3. (Currently Amended) The antenna according to claim 1, wherein the first strip lines and the second strip lines are formed alternately to each other.

4. Canceled.

5. (Currently Amended) The antenna according to claim 1, wherein the first strip lines are comprised of a pair of first and second symmetrical sub-lines ~~crossing both ends of the first slot.~~

6 -12. Canceled.

13. (New) The antenna according to claim 1, wherein the first strip lines are connected in parallel to a first multi-channel divider and the second strip lines are connected in parallel to a second multi-channel divider.

14. (New) The antenna according to claim 1, wherein the first and second feeding circuit sections are divided by at least one central port of the Y-axis, the ports having designated shapes and lengths, and the first strip lines and the second strip lines are symmetrical around the ports.

15. (New) The antenna according to claim 1, wherein the first and second feeding circuit sections are divided by at least one central port of the Y-axis, the ports having designated shapes and lengths, and the first strip lines and the second strip lines are asymmetrical around the ports.